

fio fuit  $9^h 27' 53''$  in recta cum Galilæo, & Lansbergio. Emerfio verò  $10^h 24' 17''$  in recta cum Macrobio & Sofigene.

*Mart.* die 21 Vesp. occultavit Luna Stellam  $\gamma$  *Canceri*. Immerfio fuit  $8^h 14'$  in recta per Copernicum & Boreum marginem Langreni. Emerfio fuit neglecta.

*Maii* die 24 Summo Mane  $1^h 51' 30''$  Luna abforbuit Stellam  $\tau$  *Scorpionis* proxime Byrgium. Emerfio non fuit observata.

*Sept.* die 14 Vesp. Luna occultavit Stellam  $\eta$  *Capricorni*. Immerfio fuit  $8^h 11' 20''$  inter Seleucum & Cardanum. Emerfio  $9^h 37' 30''$  paulo infra Langrenum.

Die 19 Vesp. Luna obtexit Stellam  $\delta$  *Pifcium*. Immerfio fuit  $8^h 43' 45''$  in recta per Tychonem & Langrenum. Emerfio autem  $9^h 5' 15''$  in recta cum Tychone & Keplero.

*Oct.* die 28 Manè Luna occultavit Regulum, feu Cor *Leonis* Immerfio fuit  $1^h 39' 50''$  in recta per Aristarchum & Gassendum. Emerfio  $2^h 11' 15''$  in recta per Aristarchum & Cardanum.

## V. *An Account of the Veins and Arteries of Leaves.*

By Frank Nicholls, M. D. *Præl. Anat. Oxon.*  
F. R. S.

BY a Letter from Dr. Fuller in *Holland* to the President, and communicated about *October* last, the Society was informed, that the ingenious Professor *Ruyfch* had observed something in the dissecting of Leaves analogous to the Veins and Arteries of Animals; but without explaining in what Manner these different Vessels were disposed, or by what Means they may be distinguished from each other.

When

When I had the Pleasure of examining the Collections of *Frederick Ruysch* and *Albert Seba* at *Amsterdam*, in both which were great Variety of dissected Leaves, they made no Mention of such Discovery; although in a Leaf from the Collection of *Ruysch* I could (with a Glass) observe the Fibres to be double towards the Edges of the Leaf; which at that Time I imagined to be an unnatural Division of the Fibres, as in decayed Sticks.

In the mean Time, *Albert Seba* having communicated the Method of dissecting Leaves to the Society, by a Letter to the President, I separated the pulpous from the fibrous Parts of several Leaves after his Method; when examining them by Glasses, and in Water, I found that each Fibre was naturally separated into two distinct Fibres by a thin *Stratum* of the pulpous Substance; and that this Separation was continued through all the Fibres and Stem of the Leaf, so as to form two distinct Planes of similar Net-work.

Though this Duplication of the Vessels in Leaves seems to point out an Analogy between them and the Veins and Arteries of Animals, yet I see no probable Means of guessing which are the arterial and which the venal Fibres.

That I might illustrate this Matter, as it appeared to me, I have prepared two Leaves, the one of an Apple, the other of a Cherry; in which, as well the Separation of the Fibres and Stem, as the pulpous Substance, by which they are naturally separated, are very obvious. See Plate II. A the Cherry-Leaf; B the Apple-Leaf, whose Planes are separated.

Both which (the Society having nothing of this Nature in their Repository) I desire may be accepted as a Mark of the Respect of their

Most Humble Associate,

June 11, 1730.

F. NICHOLLS.

Fig. II.

